

XRCC1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51615

Specification

XRCC1 Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P18887
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82 KDa

XRCC1 Antibody - Additional Information

Gene ID 7515

Other Names

DNA repair protein XRCC1, X-ray repair cross-complementing protein 1, XRCC1

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

XRCC1 Antibody - Protein Information

Name XRCC1 {ECO:0000303|PubMed:2247054, ECO:0000312|HGNC:HGNC:12828}

Function

Scaffold protein involved in DNA single-strand break repair by mediating the assembly of DNA break repair protein complexes (PubMed: [11163244](http://www.uniprot.org/citations/11163244), PubMed: [28002403](http://www.uniprot.org/citations/28002403)). Negatively regulates ADP- ribosyltransferase activity of PARP1 during base-excision repair in order to prevent excessive PARP1 activity (PubMed: [28002403](http://www.uniprot.org/citations/28002403), PubMed: [34102106](http://www.uniprot.org/citations/34102106), PubMed: [34811483](http://www.uniprot.org/citations/34811483)). Recognizes and binds poly-ADP-ribose chains: specifically binds auto-poly-ADP-ribosylated PARP1, limiting its activity (PubMed: [14500814](http://www.uniprot.org/citations/14500814), PubMed: [34102106](http://www.uniprot.org/citations/34102106), PubMed: [34811483](http://www.uniprot.org/citations/34811483)).

Cellular Location

Nucleus. Chromosome Note=Moves from the nucleoli to the global nuclear chromatin upon DNA damage (PubMed:28002403). Recruited to DNA damage sites following interaction with

poly-ADP-ribose chains (PubMed:14500814)

Tissue Location

Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

XRCC1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

XRCC1 Antibody - Images

XRCC1 Antibody - Background

Corrects defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents.

XRCC1 Antibody - References

Thompson L.H.,et al.Mol. Cell. Biol. 10:6160-6171(1990).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Grimwood J.,et al.Nature 428:529-535(2004).
Whitehouse C.J.,et al.Cell 104:107-117(2001).
Sano Y.,et al.Ann. Neurol. 55:241-249(2004).